

Notice of Allowability

Application No.

10/645,882

Examiner

B. Clayton McCraw

Applicant(s)

WELCH, JOHN T.

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/9/2006.
2. ☒ The allowed claim(s) is/are 5,6,12,13,19-53,55 and 58-66.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

REASONS FOR ALLOWANCE

1. Claims 5, 6, 12, 13, 19-53, 55, and 58-66 are allowed.
2. The following is an examiner's statement of reasons for allowance: As per claim 27, the prior art fails to teach a temperature control system for an audio component comprising a first thermocouple junction that absorbs heat when electric current flows through it, a driver circuit coupled to the first thermocouple junction, a temperature sensor, and a controller comprising an input unit coupled to the temperature sensor, a control output coupled to the control input of the driver circuit, and a processor coupled to the input unit and the control output. As per claim 42, the prior art fails to teach a temperature control system for an audio component comprising a first thermocouple junction that absorbs heat when electric current flows through it, a variable driver circuit coupled to a first thermocouple junction, a temperature sensor, and a controller comprising an input unit coupled to the temperature sensor, a digital to analog converter, and a digital processor coupled to the input unit and to the digital to analog converter, capable of interpreting indications of temperature of the audio component and instructing the digital to analog converter to vary the control signal so that the first thermocouple junction absorbs heat when the temperature sensor indicates that the audio component exceeds a first parameter. As per claim 58, the prior art fails to teach a method for controlling temperature of an audio component installed in a vehicle comprising providing a thermocouple junction that absorbs heat dissipated in the audio component when electric current flows through the thermocouple junction in a first direction, providing an adjustable current to the thermocouple junction, measuring the

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temperature of an audio component, and adjusting the current to the thermocouple junction in response to the temperature measurements. As per claims 62, 63, and 65 the prior art fails to teach a cooling system for an audio amplifier of a vehicle comprising, a Peltier module, a Peltier driver, a temperature sensor, a feedback mechanism, auxiliary windings on the transformer that generate an auxiliary stepped up AC voltage, and a power supply.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

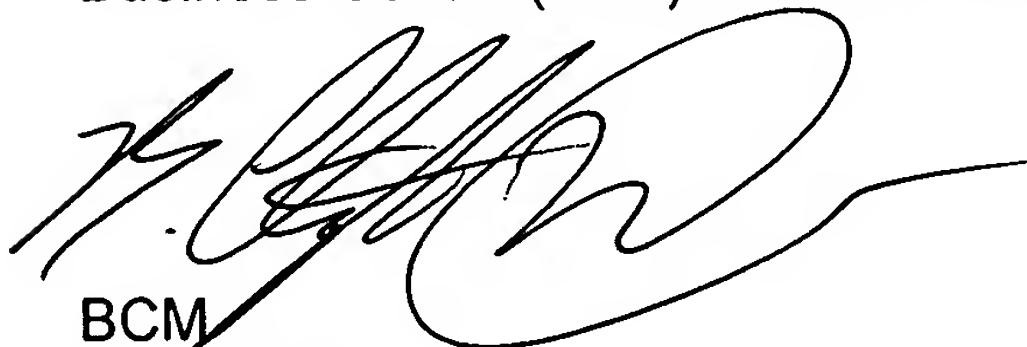
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to B. Clayton McCraw whose telephone number is (571) 272-3665. The examiner can normally be reached on M-F 8:30AM-5:00PM.

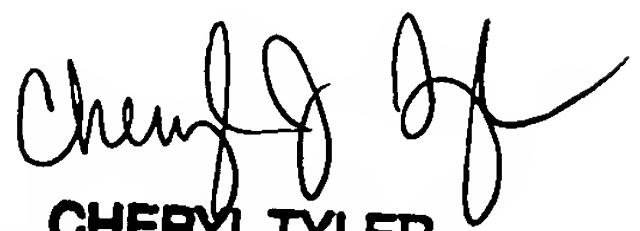
5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on (571) 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



BCM
3/21/2006



CHERYL TYLER
SUPERVISORY PATENT EXAMINER